emerged, soft-tissued female ichneumon structurally capable of withstanding such an onslaught of males? (2) How can newly hatched wings allow such vigorous and lofty flight?, or is everything all hardened, ready and waiting down there within the pine trunk? My thanks to The Englefield Estate Trust for permission to study in their woodland.—B. R. Baker, 25 Matlock Road, Caversham, Reading, Berkshire RG4 7BP.

***Philanthus triangulum* (F.) (Hymenoptera: Sphecidae) new sites in Essex.**—Two new colonies of *Philanthus triangulum* were found at Broom Hill, Chadwell and Shoebury Old Ranges both in South Essex.

At Broom Hill there appears to be a good population of *Philanthus* at two parts of the site, an old shallow quarry cut into the top of a hill on old Thames terrace gravels. One colony, the largest, is in the vertical face of a small south-facing sand exposure. The *Philanthus* have tunnel entrances between about half a metre to nearly two and a half metres above the ground level (nearly to the height of the exposure). The other colony has tunnels dug into an area of sandy ground within the area of a small older pit. Both colonies are in sheltered parts of the site. The only prey that *Philanthus* has been seen to utilize is the major prey species, the worker honeybee (*Apis mellifera* L.), which is by no means common at the site.

It seems quite possible that the *Philanthus* has remained undetected at this site for many years. The autumn squill *Scilla autumnalis* L. was found at the site only last year and in such a well botanized area as the south-east of England it seems remarkable that the plant should have previously escaped detection. The large and conspicuous robber fly *Asilus crabroniformis* L. was also found last year, the first record in Essex for many years. It seems to be present in some numbers, at least five individuals were seen on 6.viii.1992 resting on horse dung.

The locality is evidently of some importance for aculeates, also having turned up *Myrmica specioides* Bond., *M. schencki* Emery (Formicidae), *Hedychrum niemelai* L. (Chrysididae), *Smicromyrme rufipes* (F.) (Mutillidae), *Microdynerus exilis* (Herr.-Schaeff.) (Eumenidae), *Cerceris quinquefasciata* Rossi, (Sphecidae), *Andrena riparia* (Scop.) = *pilipes*, *A. trimmerana* (Kirby), *Lasioglossum malachurum* (Kirby), *L. pauperatum* (Brullé), *Dasypoda altercator* (Harris) and *Nomada fucata* Panz. (Apidae).

The Shoebury site is a nature reserve managed by the Essex Wildlife Trust. It was, until recently a neglected rifle range owned by the Ministry of Defence and appears to be a relict piece of old sand dune with a very open vegetation maintained by large numbers of rabbits. Along such a highly developed coastline it is a remarkable survival. The richness of its flora was only realized in the early 1980s and only now is the diversity of its invertebrate fauna being discovered. By their burrowing and grazing activities, rabbits play an important role in maintaining the open nature of the vegetation with short-growing plants and lichens. Many species of plant are very rare or absent elsewhere in the county.

The Hymenoptera have hardly been examined as yet, but *Myrmica specioides* and *M. schencki* (Formicidae) occur, as do *Gorytes bicinctus* (Rossius) (Sphecidae), *Andrena riparia* (Apidae) and *Hedychridium coriaceum* (Dahl.) (Chrysididae). A female *Philanthus triangulum* was captured on 29.vii.1992 whilst excavating a burrow on a gentle south-facing slope in bare sand with very close-cropped vegetation. Several other entrance holes of similar size were noticed nearby.

Records for the present century indicate that *Philanthus*, although remaining a rarity, seems to be locally common and well established in a few sites in the south-eastern counties of England (Else, 1989). Falk (1991) suggests that because of the

lack of historic records the East Anglian sites in Suffolk and north Essex may have been acquired fairly recently and may not be of a fully permanent nature. However an old record (1837) for Snaresbrook, Epping Forest given by Else (1989) suggests the possibility of its long-term presence in south Essex. However Lomholdt (1975–1976) mentions an expansion in the range of *Philanthus* in the late 1930s probably caused by unusually favourable weather conditions in July and August. It seems possible that with our recent favourable summers an expansion of range could be occurring in Britain.

Our thanks to John Felton for confirming the presence of *Philanthus* and for the determination of much of the other material, particularly in the Apidae.—P. R. Harvey, 9 Kent Road, Grays, Essex RM17 6DE and R. G. Payne, 11 Cliff Avenue, Westcliff-on-Sea, Essex SS0 7AJ.

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Hylaeus cornutus **Curtis (Hymenoptera: Sphecidae) in South London.**—This is the easiest member of the genus *Hylaeus* to identify, being the only one without white or yellow markings on the face. The female is even easier to identify on account of the clypeal processes which are usually visible to the naked eye. A further character of use in the field is the very orange-brown wing base in the female, which I regard as quite characteristic. The species is listed as notable A by Falk (1991) who comments that the habitat preferences of the species are unclear. Having found *H. cornutus* on a number of occasions in South London in recent years, I believe that some further comments can be made about this bee.

In my experience, females of *Hylaeus cornutus* attend the flowers of umbellifers, especially those of hogweed *Heracleum sphondylium* L. and wild carrot *Daucus carota* L., often in considerable numbers. I have rarely come across males at flowers and have only once witnessed any mating activity. On this occasion, the female was resting on a hogweed flower with the male hovering above her.

The habitats frequented by *Hylaeus cornutus* in South London range from scrubby chalk downland at Banstead (TQ2560, 24.vi.1989) and abandoned runways and blast bays at Kenley Airfield (TQ3258, 1.viii.1992) also on chalk, to acid grass heath and scrub at Mitcham Common (TQ2868, TQ2867, TQ2967, many records 1988–1992), ruderal communities at the edge of Crystal Palace Park (TQ3371, 9.viii.1992) and scrubby grassland/ruderal communities near Walton Bridge (TQ0966, 12.vii.1992). It seems to me that the species is not indicative of high quality habitats but rather of scrubby ruderal communities. Doubtless, it occurs in a wider range of habitats as Falk reports, but I wonder if it is really as scarce as past records suggest.

In surveying Surrey for its Diptera fauna, I frequently visit less than ideal looking sites and am often surprised by the range of species to be found on sites which might otherwise be dismissed in terms of nature conservation interest. Perhaps more attention should be paid to ruderal sites than there has been hitherto. I also collect Hymenoptera as a by-product of recording flies and sample a set of niches that might be overlooked by more specialist Hymenopterists. I would therefore draw attention to the value of